

under 35 U.S.C. §103(a) as being unpatentable over Xu and Narayan, as applied to claim 5, and further in view of Wang et al. (U.S. Patent No. 6,058,428). In rejecting independent claim 1, the Examiner stated:

Regarding independent claim 1, Xu discloses:

- Connection between the digital camera and the computer (figure 1; col 3, lines 55-67 to col 4, lines 1-3; col 4 lines 30-45)
- Mounting the image capture device as a disk on the host computer (abstract; col 2, lines 15-35; col. 3, lines 55-65)

Xu does not disclose generating the image files stored in the digital camera into HTML format and opening those files in the computer system without loading any camera-specific software.

Narayan discloses:

- saving images from a digital camera to the hard disk of the computer (figure 4, steps 201, 203)
- generating an Internet page description file in the image capture device that references the images stored therein (figure 1, steps 10, 12; figure 5, steps 225, 229)
- establishing communication between the image capture device and the host computer (col 5, lines 50-67; col 6, lines 28-45)

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Xu into Narayan to obtain the connection between a PC and a digital camera, and the creating a HTML file containing images from the digital camera.

Xu and Narayan do not explicitly disclose opening the Internet page description file in a web browser on the host computer, wherein the images stored in the image capture device are displayed on the host computer through the web browser without the need for loading camera-specific communication software onto the host computer. However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have known that once created, the HTML file can be viewed by the Netscape browser, which is a web browser, in the host computer without loading any communication software onto the host computer.

The Examiner also stated that “[c]laims 8, 13 are for the system and the computer-readable medium of the method claim 1, and therefore are rejected under the same rationale.”

Applicants respectfully disagree. The present invention provides a method and system for viewing images from a digital camera on a personal computer ("PC") without having to first load any type of communication software onto the PC. This is accomplished by automatically generating in the camera an Internet description file, such as an HTML file, that references the images stored in the camera, and then by connecting the digital camera to the PC as a mass storage device. That way, the Internet description file is easily accessible by the computer's web browser, whereby the user may view the camera images through the PC's web browser. Because *each step*, e.g., automatically generating the HTML file, mounting the digital camera to the PC, and opening the HTML file, is accomplished *without* the need for special software, the method and system of the present invention eliminates the requirement that the camera user load any type of communication software onto the host before being able to view the camera images.

Independent claim 1 recites:

- 1 A method for viewing images from an image capture device on a host computer, comprising steps of:
 - a) establishing communication between the image capture device and the host computer;
 - b) automatically generating an Internet page description file in the image capture device that references the images stored therein;
 - c) mounting the image capture device as a disk on the host computer; and
 - d) opening the Internet page description file in a web browser on the host computer, wherein the images stored in the image capture device are displayed on the host computer through the web browser without the need for loading camera-specific communication software onto the host computer.

Independent claim 8 is a system claim of similar scope to claim 1. Claim 13, recites:

13. A computer-readable medium containing program instructions for viewing images from a digital camera on a host computer, the program instructions for:
 - a) automatically generating an HTML file that references the images stored in the digital camera;
 - b) establishing a Universal Serial Bus (USB) connection between the digital camera and the host computer; and
 - c) identifying the digital camera to the host computer as a mass storage device class whereby the digital camera appears to the host computer as a disk,

thereby allowing a user to open the HTML file in a web browser on the host computer, wherein the images stored in the digital camera are displayed on the host computer through the web browser without the need for loading camera-specific communication software onto the host computer.

Applicant respectfully submits that Xu in view of Narayen fails to teach or suggest the present invention as recited in claims 1, 8 and 13. As stated in Applicants' previous response dated May 31, 2001, Xu combined with Narayen teaches a digital camera coupled to a personal computer, which is further coupled to a server. The software program of Xu is loaded onto and permanently stored in the personal computer of Narayen, which allows the digital camera to appear as a disk to the personal computer. The images stored in the digital camera are transmitted via a serial communication port to the personal computer, and the user creates an album comprised of album format data referencing the images. The album format data and images are transmitted to the server, where when requested, an HTML page referencing the images is created according to the layout and style identified by the album format data. The HTML page is viewable by the requester via a web browser.

Neither Xu nor Narayen, singularly or in combination, teach or suggest "mounting the image capture device as a disk on the host computer . . . without the need for loading . . . communication software onto the host computer," as recited in claims 1, 8 and 13. In the present invention, the digital camera identifies itself as a mass storage device class to the host computer's operating system through communication software *in the digital camera*, not on the host computer. (Specification, page 10, lines 7-10). In response, the host computer's operating system executes existing protocols to load the appropriate drivers to mount the digital camera as a disk volume. (Id., lines 10-13). Thus, because the present invention takes advantage of the *existing* functionality of the host computer's operating system, there is no need to load any type of communication software onto the host computer in order to mount the camera as a disk.

In contrast, Xu requires that its communication software be loaded into the host computer before the digital camera can be mounted to the computer. Without the software, Xu's computer does not have the ability to communicate with the digital camera as a disk. Accordingly, Xu cannot teach or suggest "mounting the image capture device as a disk on the host computer . . . without the need for loading . . . communication software onto the host computer," as recited in claims 1, 8 and 13.

In the Final Office Action, the Examiner states:

First, the limitation "mounting the image capture device as a disk onto the host computer without the need for loading a communication software onto the host computer" is not claimed and is not the invention. Only "mounting the image capture device as a disk onto the host computer" is claimed.

Second, the limitation "without the need for loading a communication software onto the host computer" is claimed in combination with "opening the Internet page description file in a web browser on the host computer, wherein the image stored in the image capture device are displayed on the host computer through the web browser" (claim 1).

This is verified in the specification (page 1, lines 11-14, viewing images from an image capture device on a host computer, and more particularly to a method and system for viewing images from an image capture device on the host computer without having to load device-specific software onto the host).

Applicants respectfully disagree. It is clear from the Specification, that the present invention is directed to allowing a user to "view images from an image capture device on the host computer without having to load device-specific software onto the host." (Specification, page 1, lines 11-14). In claim 1, steps (a) through (d) describe a "method for viewing images from an image capture device on a host computer." According to the Specification, images are viewable without having to load software onto the host. Indeed, claim 1 expressly states that the images are viewable on the host computer "without the need for loading camera-specific communication software onto the host computer."

Based on the clear language of claim 1 and the Specification, *each step*, including the

mounting step, must be performed *without having to load device-specific software onto the host*.

If any one of the steps (a) through (d) required loading software onto the host, the Specification, and indeed, the whole goal of the present invention, would be contradicted.

Applicants respectfully submit that the portion of the Specification relied upon by the Examiner actually supports Applicants' present argument. As is stated in the cited portion, "[t]he present invention relates to a . . . method and system for *viewing images* from an image capture device on the host computer without having to load device-specific software onto the host." Claim 1 recites a "method for viewing images from an image capture device on the host computer, comprising" steps (a) through (d), "wherein the images stored in the image capture device are displayed on the host computer through the web browser without the need for loading camera-specific communication software onto the host computer." Claim 1 is consistent with the cited portion of the Specification *only* if steps (a) *through* (d) are performed without loading software onto the host.

The Specification explicitly supports the position that the step of "mounting the image capture device as a disk on the host computer" is performed "without the need for loading camera-specific communication software onto the host computer," as recited in claim 1. The Specification states that, "[t]o identify itself as a mass storage device class to the PC's 112 operating system 116, the digital camera 110 includes USB Mass Storage Device Class server-software that operates in accordance with USB protocols to identify to the OS 118 that the device is a mass storage device." Specification, page 10, lines 7-10. Because *the digital camera contains the server-software*, the host computer does not need any other software to mount the digital camera as a disk volume.

Accordingly, neither Xu nor Narayan teach or suggest "mounting the image capture device as a disk on the host computer . . . without the need for loading . . . communication

software onto the host computer,” as recited in claims 1, 8 and 13.

Furthermore, Xu in view of Narayen also fails to teach or suggest automatically “generating an Internet page description file” or HTML file *in the image capture device or digital camera* that references the images stored therein, as recited in claims 1, 8 and 13. In the present invention, the image capture device or digital camera has the ability to generate the Internet description file internally. For instance, in claim 8, it is expressly recited that the “digital camera includ[es] means for generating an Internet page description file.” Thus, no other device or computer is utilized to create the Internet description file.

In contrast, digital images are *downloaded* from the digital camera into “a digital processing system, such as a computer system” in Narayen. (Col. 6, lines 31-34). Once the images are stored in the computer system, the user creates an album comprised of “album format data.” The album format data and the images are then transmitted to a server computer system, where the data is stored and the images are converted into a web-viewable format. (Col. 8, lines 21-42). When a request to view the album is received by the server, the server “generates an appropriate page of an album in HTML format and sends the page to the web browser which requested a viewing of the album.” (Col. 8, lines 45-58).

Once the digital images are downloaded from the digital camera to the computer system, the digital camera has no other use. Thus, Narayen simply fails to teach or suggest “generating an Internet page description file” or HTML file *in the image capture device or digital camera* that references the images stored therein, as recited in claims 1, 8 and 13. In the Final Office Action, however, the Examiner argues that Narayen discloses this feature in Figure 1, steps 10, 12 and Figure 5, steps 225, 229.

Figure 1 of Narayen is an overview of a process taught in the prior art. In step 10, an image from a digital camera “is acquired.” According to Narayen, “[t]his acquisition typically

occurs by a digital photography program, such as Adobe's Photoshop, which receives the input from the digital camera and causes the inputted image *to be saved in the file management system of the computer system.*" (Col. 1, lines 56-62). In step 12, "a separate computer program, such as a web authoring software program creates HTML files." (Col. 1, lines 62-63). Thus, the process in Figure 1 explicitly states that the *computer system* generates the HTML file.

Similarly, Figure 5 is an overview of the process taught in Narayen. Step 225 states, "acquire images and build ("author") an album . . . that can be converted into internet-viewable format (e.g., HTML format)." Column 8, lines 11-14 states the images are "acquired *from* a digital camera, or a scanner, or from a file storage device such as a CD ROM or hard disk." Clearly, if images are acquired *from* a digital camera, they are downloaded onto the personal computer. Step 227 states, "publish software *transmits* the album format data and signature (or images) *to a server computer system.*" As is shown in Figure 2, the server computer system 111 is a computer system separate and apart from the personal computer system 121, 125, 135, 137 to which the digital camera is coupled. Step 229 states, "server computer system saves album format data and images in a database (images are converted into web viewable format)." At Step 233, the "server computer system generates an appropriate page of an album in HTML format and sends the page to the web browser which requested the album." Thus, in the process illustrated in Figure 5, the *server computer system* generates the Internet viewable file.

While Narayen teaches generating web viewable pages referencing images *from* the digital camera, Narayen does not teach or suggest *generating* such web viewable pages automatically "in the image capture device" or "in the digital camera." As stated above, Narayen teaches that the computer system (Figure 1) and the server computer system (Figure 5) generate the web viewable file. Applicants respectfully submit that neither the computer system nor the server computer system can reasonably be construed to be "an image capture device" or "a digital

camera.” The fact that image data can be downloaded from the image capture device/digital camera to the computer system does not make the computer system an image capture device or a digital camera. If this were so, any device that *received* image data, such as a television set, could be construed to be an image capture device or digital camera. Applicants respectfully submit that such an interpretation strains the boundaries of credulity.

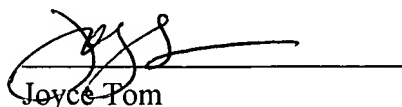
Accordingly, Applicant respectfully submits that nothing in Figures 1 or 5 or the cited portions of Narayan teach or suggest automatically generating “in the image capture device” or “in the digital camera” an Internet viewable file, such as an HTML file, as recited in claims 1, 8 and 13. Claims 1, 8 and 13 are therefore, allowable over Xu and Narayan.

For the reasons discussed above, Applicants respectfully submit that claims 1, 8 and 13 are allowable over Xu and Narayan. Claims 2-7, 9-12, and 14-20 depend on independent claims 1, 8, and 13 respectively. Accordingly, the arguments above apply with equal force to the dependent claims. Applicant respectfully submits, therefore, that claims 2-7, 9-12, and 14-20 are allowable over the cited references.

In view of the foregoing, it is submitted that the claims in the application are patentable over the cited reference and are in condition for allowance. Reconsideration of the rejections and objections is requested.

Applicants’ attorney believes that this application is in condition for allowance. Should any unresolved issues remain, Examiner is invited to call Applicants’ attorney at the telephone number indicated below.

Respectfully submitted,



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